R481604645 2024-04-05

AVENTICS Series ITS Tie rod cylinders (ISO 15552)

The AVENTICS Series ITS (ISO 15552) cylinders are often chosen when extremely large loads need to be moved efficiently and under control with the familiar ease of operation. The Series ITS (ISO 15552) cylinders are easily configurable to your application needs.





Technical data

 Industry
 Industrial

 Standards
 ISO 15552

 Piston Ø
 160 mm

 Stroke
 200 mm

 Ports
 G 3/4

Functional principle Double-acting

Cushioning Pneumatic adjustable cushioning

Magnetic piston Piston with magnet Environmental requirements Industry standard cold-resistant

oold roolotant

Piston rod thread - type External thread

Piston rod thread M36x2
Piston rod single

Scraper Cold-Resistant Scraper

Pressure for determining piston forces 6,3 bar
Retracting piston force 11875 N
Extracting piston force 12667 N
Min. ambient temperature -40 °C
Max. ambient temperature 70 °C
Min. working pressure 2 bar

series ITS

Tie rod cylinder ISO 15552, Series ITS

R481604645 2024-04-05

Max. working pressure10 barCushioning length46 mmCushioning energy160 JWeight 0 mm stroke12.5 kgWeight +10 mm stroke0.21 kgStroke max.2700 mm

Medium Compressed air

Min. medium temperature-40 °CMax. medium temperature70 °CMax. particle size50 μmMin. oil content of compressed air0 mg/m³Max. oil content of compressed air5 mg/m³

Clamping piece for magnetic field sensor Clamping piece for magnetic field sensor

necessary necessary

Material

Piston rod Stainless Steel Scraper material Polyurethane

metal

Material tie-rod Stainless Steel

Seal material Acrylonitrile butadiene rubber

Material, front cover Die-cast aluminum

Cylinder tube Aluminum

End cover Die-cast aluminum

Nut for piston rod Steel, chrome-plated

Part No. R481604645

Technical information

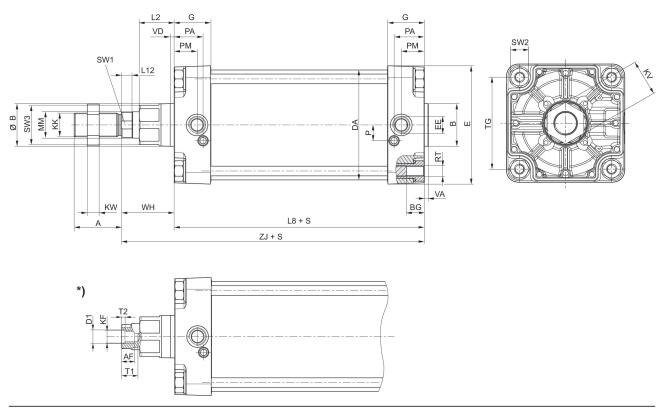
The pressure dew point must be at least 15 °C less than ambient and medium temperature and may not exceed 3 °C.

The oil content of compressed air must remain constant during the life cycle.

Use only the approved oils from AVENTICS. Further information can be found in the "Technical information" document (available in https://www.emerson.com/en-us/support).

R481604645 2024-04-05

Dimensions



Piston Ø	А	AF		ØB	BG	D1	DA		EE
160	72	36	65	65	24	25	167	180	G 3/4
200	72	36	75	75	24	25	210	220	G 3/4
250	84	50	90	90	25	31	262	280	G 1
320	96	55	110	110	28	37	336	350	G 1

Piston Ø	G	KF	KK	KV	KW	L2	L8	L12	MM
160	56	M24	M36x2	55	18	53	180	16	40
200	54	M24	M36x2	55	18	56	180	16	40
250	59.5	M30	M42x2	65	21	67	200	20	50
320	61.5	M36	M48x2	75	24	76	220	23.25	63

Piston Ø		PA	PM	RT	SW1	SW2	SW3	T1	T2
160	24	45	35	M16	36	27	60	40	10
200	22.5	42	30	M16	36	27	60	40	10
250	29	46	32.8	M20	46	41	80	60	10
320	30	48	37	M24	55	50	95	65	13

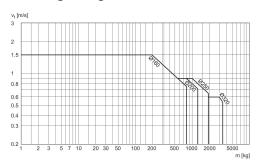
Piston Ø	TG	VA	VD	WH	ZJ
160	140	6	6	80	260

S = stroke
*) For cylinders with optional piston road with internal thread

R481604645 2024-04-05

Piston Ø	TG	VA	VD	WH	ZJ
200	175	6	6	95	275
250	220	10	31	105	305.3
320	270	10	34	120	340.5

Cushioning diagram



 v_t = Piston velocity [m/s] m = Cushionable mass [kg]

R481604645 2024-04-05

